



HALIFAX CHAMBER OF COMMERCE

stronger together

Input to the Regional Municipal Planning Strategy

Presented by the Energy Advisory Committee of
the Halifax Chamber of Commerce

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WE ARE

A not-for-profit business organization that takes a business - like approach to its operations.

Objective and non-partisan; we do not lobby for specific interests.

Funded exclusively through membership fees and fees for services we provide.

Experts in running conferences, publishing and disseminating information, helping people network, developing leadership skills, and building community capacity.

Specialists in the development and advocacy of public policy.

Not a government department or agency.

Independent from, but affiliated with, the Nova Scotia, Atlantic Provinces, and Canadian Chamber of Commerce.

A diverse organization made up of businesses that mirror the Halifax, Nova Scotia, and Canadian economies.



The Halifax Chamber of Commerce is a not-for-profit business advocacy organization that strives to strengthen the local business culture and shape its environment through effective leadership. On behalf of its 1,500 members and the Halifax business community at-large, over the years the Chamber has made Energy and Sustainability an important focus and an integral part of its advocacy work.

Energy security and sustainable energy development are two important aspects of any modern, competitive economy. To make Halifax more competitive in this global economy, we need to embrace progressive and sustainable energy policies enabling new economic opportunities and benefits. We need to leverage the city's leadership position as a leader of the emerging Green Economy by offering competitive and knowledge-intensive products and services with a net zero environmental impact.

Small businesses, comprising the majority of the Chamber's membership, are vital to the health of the Halifax economy. To support the growth of this core business group it is critically important to reduce its cost of doing business. Managing vulnerability to rising energy costs is a crucial task; it requires adopting new approaches to energy policy and energy management in Halifax and Nova Scotia. Incorporating sound energy policies into the Regional Municipal Planning Strategy is an important step in this process.

Attached are policy recommendations developed by the Chamber's Energy Advisory committee – a diverse group comprised of entrepreneurs and energy experts, and built upon the Chamber's past public energy policy work. We would appreciate an opportunity to discuss these recommendations with HRM Council and staff, and hope these recommendations could form a foundation of an Energy Chapter in the revised Municipal Regional Planning Strategy.

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Chair, Energy Advisory Committee, Halifax Chamber of Commerce

HRM's Regional Municipal Planning Strategy: Energy Policy Recommendations

1. **Energy Touches Everything:** Energy to play a significant role in HRM's Municipal Planning Strategy.
2. **Sustainable Urban Energy Planning:** use proven, integrated and systematic approaches to urban energy planning.
3. **Energy in Policy and Legislation:** leverage Nova Scotia's advanced energy policies and legislation to aggressively deploy energy efficiency and renewable energy policies and by-laws in HRM and reduce the community's carbon footprint.
4. **Energy and Environment:** target significant reductions of HRM's energy-related greenhouse gas (GHG) emissions.
5. **Energy and Housing:** support and promote energy efficient housing in HRM with advanced Energuide ratings as an initially voluntary target.
6. **Energy and Commercial Infrastructure:** utilize established best practices, protocols and tools to support and promote a transformative green building market in HRM.
7. **Energy and Transportation:** advance clean energy public transportation infrastructure in HRM.
8. **Energy and Utilities:** support the investigation and deployment of "Smart Grid"-enabling technologies to facilitate "Smart Power" for a "Smart City" concept in HRM.
9. **Energy and Municipal Economic Opportunities:** identify, communicate, and enable economic benefits of sustainable energy strategies.
10. **Energy and Communications:** launch a municipal energy awareness program.
11. **Energy and Education:** establish advanced levels of energy awareness and energy literacy in HRM

Introduction: Energy Touches Everything

Until recently, the role of energy in the growth of cities has been taken for granted. Cities, and the people who live there, now require larger and larger amounts of energy to sustain and grow, and Halifax Regional Municipality is among these growing cities.

Liquid fuels for transportation have offered us sprawling, low density urban geography. In HRM, car culture, and its pervasive and costly infrastructure, remains king. This must change as HRM evolves to the more sustainable urban model of higher density better served by public transit.

Except for a small percentage of buildings close to natural gas networks, most buildings in HRM, including houses, are also heated with liquid fossil fuels. All but a handful of buildings receive their electrical power from a grid distributing electricity generated by large power plants – this grid is transforming to a more renewable portfolio, however as of 2011 a large percentage of the utility grid is powered from fossil fuels.

Cities rely on potable water as much as they rely on energy for their enduring viability. Naturally it takes large amounts of energy to procure, treat and pump fresh drinking water and then, in turn, to deal with storm and sewer effluent.

HRM's Municipal Planning Strategy (MPS) is an evolving and dynamic document with its roots in urban planning concepts going back over 40 years. Up until now, energy has barely even been mentioned in the MPS and its myriad implications have not been a significant planning factor. This document recognizes energy as integral to the success of HRM's MPS and proposes to embed consideration of energy security, energy conservation, energy distribution and energy consumption into all aspects of HRM's planning procedures. The time has come to acknowledge that in imagining the city, as in all matters of human endeavor, energy touches everything.

Sustainable Urban Energy Planning:

Using Proven, Integrated, and Systematic Approaches to Urban Energy Planning.

- Sustainable Use of Energy Resources: maximize the efficient use of energy resources across all end uses, while minimizing impacts on the environment;
- Ecological Community Form and Function: maximize the benefit of natural systems and preserve and restore the natural environment;
- Environmentally Sound and Energy Efficient Land Use Optimization: minimize the consumption of energy, material and natural resources by efficiently utilizing the existing urban footprint; enable cost-effective distributed energy resource applications and urban mass transit systems;
- Energy and Environmental Technology Integration: integrate cleaner energy systems into development projects, using “whole building” and “community-scale” approaches;

- **Community Resources Management:** decentralize resource management systems to the neighbourhood level; promote shared energy resources and material and process efficiencies;
- **Social Equity and Economic Vitality:** increase access to affordable housing, public services and employment for lower-income populations through energy-efficient planning and design.

Energy in Policy and Legislation:

Leverage Nova Scotia's advanced energy policies and legislation to aggressively deploy energy efficiency and renewable energy policies and by-laws in HRM and reduce the community's carbon footprint.

- The Environmental Goals and Sustainable Prosperity Act (2007) commits to establish Nova Scotia as one of the cleanest and sustainable environments in the world by 2020;
- Nova Scotia's Climate Change Action Plan (2009) details 68 Actions which the Province has committed to undertake to reach carbon emissions reduction goals by 2020;
- Efficiency Nova Scotia Corporation Act (2009) establishes an administrator to manage electricity demand-side management programs in the Province and a fund to be used to defray the costs of electricity demand-side management programs, and provides the administrator with the authority to engage in energy efficiency and conservation programs other than electricity demand-side management programs;
- Nova Scotia's first Renewable Electricity Plan (2010) regulates that by 2015, 25% of Nova Scotia's electricity will be supplied by renewable energy sources. The plan includes Community Feed-in Tariff options for locally-based renewable electricity projects.

Energy and Environment:

Reduce HRM's carbon footprint by considerably reducing energy-related greenhouse gas (GHG) emissions.

- Maximize the use of energy efficiency measures at each stage of the development and operations of the built environment;
- Maximize the use of cleaner energy sources in the three basic energy services: electricity supply, heating and cooling, and transportation;
- Maximize the use of indigenous clean energy sources (wind, solar, geothermal, biomass).

Energy and Housing:

Support and promote energy efficient housing in HRM.

- Advance and incentivize energy conservation practices: establish advanced Energuide ratings as a voluntary, and subsequently – mandatory energy performance target;
- Advance energy efficiency and demand side management measures: establish an electricity consumption reduction target compared to existing household consumption;
- Facilitate and support market trends in choosing high-efficiency and clean residential space heating technologies both for new construction and retrofits;
- Increase on-site energy generation: establish an on-site energy generation target for heating and electricity supply;
- Establish a voluntary target for residential housing average carbon footprint;
- Establish a voluntary water usage target to lower overall distribution system energy demands.

Energy and Commercial Infrastructure:

Utilize established best practices, protocols and tools to support and promote a transformative Green Building market in HRM.

- Utilize advanced rating systems as major enablers to moving the built environment from “business as usual” to carbon-neutral and zero energy building solutions;
- Introduce tax or other financial incentives for retrofitting energy conservation strategies in existing buildings;
- Introduce accelerated planning approvals to registered LEED projects targeting Gold or Platinum certification;
- Mandate building owners and operators to understand measure and compare on-going energy performance of their building portfolio; establish a voluntary target for energy use intensity in commercial buildings. Identify similar voluntary targets for all other non-residential type buildings;
- Establish and advance Building Energy Performance targets including third party Certification and Energy Labeling practices; encourage refurbishment to near-zero energy performance;
- Develop/support District Energy networks based on combined heat and power plants; permit and encourage inter-building energy flows;

- Develop advanced financial solutions supporting higher penetration of High Energy Performance Buildings and Communities.

Energy and Transportation:

Advance clean energy-based public transportation infrastructure in HRM.

- Develop and establish a sustainable mobility policy;
- Advance an energy-efficient public transportation infrastructure;
- Establish an advanced congestion and traffic management;
- Reduce energy consumption by improving fuel efficiency on the vehicle side;
- Gradually replace oil by bio fuels, natural gas, hydrogen, electricity or other cleaner fuels;
- Encourage active transportation in core urban areas.

Energy and Utilities:

Deploy Smart Power for a Smart City.

- Establish an efficient balance between centralized and distributed power supply;
- Support the development of an infrastructure for distributed power generation;
- Support the deployment of Smart Grid-enabling technologies, such as metering and communication technologies for the eventual efficient control of the two-way flow of electricity as an integral part of the Smart City concept deployment.

Energy and Municipal Economic Opportunities:

Enable economic benefits of sustainable energy deployment.

- Support energy efficiency services in HRM;
- Benefit from energy-related jobs;
- Attract energy equipment manufacturing and energy service companies;
- Establish consistent Green Procurement practices.

Energy and Communications:

Launch a municipal energy awareness program.

- Emphasize a positive gain from energy conservation, energy efficiency and clean energy generation;
- Clearly communicate incentives, rebates and other existing financial support;

- Encourage active involvement and commitment, use competition to motivate behaviour changes.

Energy and Education:

Establish advanced levels of energy awareness and energy literacy in HRM

- Support conservation awareness education to reduce energy consumption: audiences include consumers, general public, public school system and a vibrant post-secondary network;
- Advance renewable energy deployment by supporting workforce technical training in site assessment, installation, commissioning and maintenance of renewable technologies;
- Increase deployment potential for advanced technologies like electric vehicles by supporting R&D and technology commercialization.

Conclusion:

The Halifax Chamber of Commerce Energy Committee believes energy has a crucial role in the future of the Halifax Regional Municipality, as it touches every aspect of municipal activities. We see a critical need for an Energy chapter in the revised Regional Municipal Planning Strategy. This document presents the vision of the Chamber on the key energy-related aspects of municipal regional planning and includes recommendations for the revised planning strategy.

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